UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT RIGHT-OF-WAY LEASE/GRANT

SERIAL NUMBER N-85077

- 1. As approved by the Record of Decision for the *Silver State Solar Project (N-85077)*, dated October 12, 2010, a right-of-way lease/grant is hereby issued pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (43 U.S.C. 1761 et seq.) and the Bureau of Land Management right-of-way regulations (43 CFR Part 2800) and amendments thereto.
- Nature of Interest:
 - a. By this instrument, the holder:

Silver State Solar Power North, LLC A Wholly owned subsidiary of NextLight Renewable Power, LLC Attn: Frank De Rosa 353 Sacramento Street, Suite 2100 San Francisco CA, 94111

receives a right to use and occupy the following described public lands to construct, operate, maintain, and decommission a 50-MW alternating current (AC) (60-MW direct current (DC)) photovoltaic (PV) solar power plant project, including associated facilities as described in the approved Plan of Development (POD), incorporated herein:

See attached legal description and map (Exhibit A).

b. The instrument issued herein consists of a 50-MW AC (60-MW (DC)) PV solar power plant and associated facilities, to include: a 320-acre PV solar array field (consisting of fixed-tilt mounting systems supported by driven steel posts, PV solar modules, DC collection system comprised of underground cabling and combiner boxes, power inverters, three-phase pad mounted transformers that convert the output of inverters to 34.5 kilovolts (kV)), a 0.25-mile paved access road (30-feet wide), an underground fiber optic communications line (located along access road), a perimeter fence, a perimeter road (within the security fence), interior solar field access ways, a 34.5kV collection system to convey electricity from the solar field to the substation, a 1-acre 34.5kV/230kV substation (consisting of 34.5kV/230kV step-up transformers, breakers, bus work, protective relaying and associated equipment), a 0.4-mile 230kV overhead power transmission line and associated access road, a 1.2-acre operation and maintenance facility (consisting of a 2,000 square foot operation and maintenance building, parking area, a SCADA

communications system, and other associated facilities), a 0.8-mile maintenance road (located adjacent to the outside of the perimeter fence), a 20-foot-wide fire break (located immediately adjacent to the outside of the security fence); and the following temporary facilities as needed, only for the duration of the construction activity: a 2.25-acre water storage pond, a 4-acre construction mobilization and lay down area, and a 3.8 acre workforce parking area.

The total footprint covered by this instrument, consists of 618.63 acres, more or less.

- c. This instrument shall expire on <u>December 31, 2039</u>, unless, prior thereto, it is relinquished, abandoned, or terminated pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.
- d. This instrument may be renewed by the Authorized Officer. The holder is required to submit an application for renewal at least 120 calendar days prior to the expiration date of this instrument. The Authorized Officer will review the application for renewal to ensure the holder is complying with the terms, conditions, and stipulations of this instrument and applicable laws and regulations. If renewed, the right-of-way shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the Authorized Officer deems necessary to protect the public interest.
- e. Notwithstanding the renewal, expiration, relinquishment, abandonment, or termination of this instrument, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the renewal, expiration, relinquishment, abandonment, or termination of this authorization.
- f. The Authorized Officer retains the right of access to the lands included within the right-of-way at any time and may enter any facility on the right-of-way in accordance with 43 CFR 2805.15(a). The holder shall pay monitoring fees in accordance with 43 CFR 2805.16 for the reasonable costs incurred in the inspection and monitoring of construction, operation, maintenance, and decommissioning of the right-of-way.
- g. This instrument is issued subject to valid existing rights in accordance with 43 CFR 2805.14.

3. Rental:

a. For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management the fair market value of the right-of-way, which includes both base rent and a megawatt capacity fee, as determined by the Authorized Officer unless specifically exempted from such payment by law or regulation. Provided, however, that the rental may be adjusted by the Authorized Officer, whenever necessary, to reflect changes in fair market value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices. The rental provisions of this authorization may also be modified consistent with the provisions of any regulatory changes or pursuant to the provisions of any new or revised statutory authorities.

b. The rental includes an annual base rent for the acreage of the public land included in the authorization and a megawatt capacity fee based on the authorized megawatt capacity of the approved solar energy facilities. The base rent is due and payable upon the date of issuance of this instrument and will be paid on an annual basis consistent with the regulations. The base rent will be adjusted each year based on the Implicit Price Deflator-Gross Domestic Product (IPD-GDP) index. The megawatt capacity fee is based on the authorized megawatt capacity approved by the Authorized Officer, or an approved phase of development, and will be paid on an annual basis upon the start of electric generation from the solar energy facilities. The megawatt capacity fee will be phased-in over a 5-year period after the start of electric generation (at the rate of 20 percent the first year, 40 percent the second year, 60 percent the third year, 80 percent the fourth year, and 100 percent the fifth and subsequent years of operations). The 5-year phase-in period will apply separately to each phase of development as approved by the Authorized Officer.

(The rental calculation and \$ amount owed the BLM will be contained in the offer to issue letter, along with any phase-in determination language).

4. Bond:

a. A Performance and Reclamation bond, in an amount determined by the Authorized Officer, shall be obtained by the holder to ensure compliance with the terms and conditions of this instrument. The Authorized Officer will require that the holder submit a Reclamation Cost Estimate for review and to assist the Authorized Officer in determining the bond amount. The holder shall provide the Authorized Officer proof that a bond in the required amount has been obtained by such date as specified by the Authorized Officer. The amount of the bond will be limited to the anticipated liabilities associated with the activities approved by the Notice to Proceed. If the Notice to Proceed is limited to only an initial phase of development or activity, the bond amount will be limited to that phase or activity. The bond amount would increase with the issuance of a Notice to Proceed for future phases of development or additional activities. The bond must be maintained in effect until removal of improvements and restoration of the right-of-way has been accepted by the Authorized Officer. Acceptable bond instruments include cash, cashier's or certified check, certificate or book entry deposits, negotiable U.S. Treasury securities (notes, bills, or bonds) equal in value to the bond amount, surety bonds from the approved list of sureties (U.S. Treasury Circular 570) payable to the Bureau of Land Management (BLM), irrevocable letters of credit payable to the BLM issued by financial institutions that have the authority to issue letters of credit and whose operations are regulated and examined by a federal agency, or a policy of insurance that provides BLM with acceptable rights as a beneficiary and is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction and whose insurance operations are regulated and examined by a federal or state agency. The Authorized Officer will not accept a corporate guarantee as an acceptable form of bond. The Authorized Officer will review the bond on an annual basis to ensure adequacy of the bond amount. The bond will also be reviewed at the time of any assignment, modification, or renewal of this instrument. The Authorized Officer may increase or decrease the bond amount at any time during the term of the right-of-way authorization, consistent with the regulations. (The bond \$ amount will be determined by the BLM and provided to the holder by letter prior to approval of a Notice to Proceed).

- b. The holder agrees that any bond held as security for holder's performance of the terms and conditions of this instrument may, upon failure on the holder's part to fulfill any of the requirements herein set forth or made a part hereof, be retained by the United States to be applied as far as may be needed to the satisfaction of the holder's obligations assumed hereunder, without prejudice whatever to any other rights and remedies of the United States.
- c. Should the bond delivered under this instrument become unsatisfactory to the Authorized Officer, the holder shall, within 30 calendar days of demand, furnish a new bond. In the event of noncompliance with the terms and conditions of this instrument, the BLM will notify the holder that the surety or other bond instrument is subject to forfeiture and will allow the holder 15 calendar days to respond before action is taken to forfeit the bond and suspend or terminate the authorization.

5. Terms and Conditions:

- a. This instrument is issued subject to the holder's compliance with all applicable laws and regulations and, in particular, with the regulations contained in Title 43 Code of Federal Regulations Part 2800, including the terms and conditions required by 43 CFR 2805.12. Failure of the holder to comply with applicable law or regulations or any terms, conditions, or stipulations of this instrument shall constitute grounds for suspension or termination thereof. The Authorized Officer may change the terms and conditions of this instrument as a result of changes in legislation, regulations, or as otherwise necessary to protect public health or safety or the environment in accordance with 43 CFR 2805.15(e).
- b. The right-of-way Stipulations (Exhibit B), attached hereto, and the approved Plan of Development, dated January 2010, are incorporated into and made a part of this instrument as fully and effectively as if they were set forth herein in their entirety.
- c. The holder shall perform all operations in a good and workmanlike manner, consistent with the approved Plan of Development, so as to ensure protection of the environment and the health and safety of the public. The Authorized Officer may order an immediate temporary suspension of operations, orally or in writing, in accordance with 43 CFR 2807.16 to protect public health or safety or the environment if the Authorized Officer determines that the holder has violated one or more of the terms, conditions, or stipulations of this instrument. An immediate temporary suspension order is effective until the holder receives a written Notice to Proceed from the Authorized Officer.
- d. The holder will not initiate any construction or other surface disturbing activities on the right-of-way without prior written authorization of the Authorized Officer. Such authorization will be a written Notice to Proceed (Form 2800-15) issued by the Authorized Officer or his/her delegated representative. Each Notice to Proceed will authorize construction or use and occupancy only as therein expressly stated and only for the particular location or use and occupancy therein described, i.e., a construction phase or site location. The Authorized Officer will issue a Notice to Proceed subject to such terms and conditions as deemed necessary when the design, construction, use, occupancy, and operation proposals are in conformity with the terms and conditions of this instrument.
- e. The holder shall start construction of the initial phase of development within 12 months after issuance of a Notice to Proceed but no later than 24 months after the effective date of the issuance of

- this right-of-way lease/grant. The holder shall complete construction within the timeframes approved in the Plan of Development, but no later than 24 months after start of construction, unless the project has been approved for phased development as provided for in paragraph (5)(f).
- f. If this right-of-way lease/grant and approved Plan of Development provides for a phased development, construction of each subsequent phase must begin within 3 years of the start of construction of the previous phase. A Notice to Proceed will be required to be issued by the Authorized Officer for each phase of development. The Notice to Proceed for a particular phase of development may be subject to the issuance of additional Notices to Proceed for specific activities within the particular development phase.
- g. During operations, the holder shall maintain all onsite electrical generation equipment and facilities in accordance with the design standards in the approved Plan of Development. Any idle, improperly functioning, or abandoned equipment or facilities that have been inoperative for any continuous period of 3 months or more must be repaired, placed into service, and/or removed from the site within 30 calendar days from receipt of a written Notice of Failure to Ensure Diligent Development from the Authorized Officer, unless the holder is provided an extension of time by the Authorized Officer. To obtain an extension of the 30-day deadline, the holder must submit a written request to the Authorized Officer and show therein good cause for any delays in repairs, use, or removal; an estimate when corrective action will be completed; and evidence of diligent operation of the equipment and/or facilities.
- h. Failure of the holder to comply with any diligent development provision of this instrument may cause the Authorized Officer to suspend or terminate the authorization in accordance with 43 CFR 2807.17 2807.19, and use the posted Performance and Reclamation bond to cover the costs for removal of any equipment and/or facilities. The Authorized Officer will provide the holder a written Notice of Failure to Ensure Diligent Development prior to the suspension or termination of the authorization. The holder will be provided an opportunity to correct any noncompliance in accordance with 43 CFR 2807.18 or submit a written request to the Authorized Officer for an extension of the timelines in the approved Plan of Development.
- i. Upon termination by the Authorized Officer or expiration of this instrument, all improvements shall be removed from the public lands within 180 calendar days or otherwise disposed of as provided for in the approved Plan of Development, or as directed by the Authorized Officer.
- j. This instrument shall, at a minimum, be reviewed by the Authorized Officer at the end of the 10th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that this instrument may be reviewed at any time deemed necessary by the Authorized Officer in accordance with the regulations.
- k. This instrument may be assigned consistent with the regulations, but all assignments are subject to approval by the Authorized Officer. In addition, the qualifications of all assignees must comply with the requirements of the regulations. A partial assignment of this instrument shall not be approved if such action would hinder the Authorized Officer's management of the authorization or the associated public lands.

1. Upon the request of the Authorized Officer, the holder shall provide access to environmental, technical, and financial records, reports, and other information related to construction, operation, maintenance, and decommissioning of the right-of-way. Any information marked confidential or proprietary will be kept confidential to the extent allowed by law. Failure of the holder to cooperate with such request, provide data, or grant access to such records, reports, and information may, at the discretion of the Authorized Officer, result in suspension or termination of the right-of-way lease/grant in accordance with the regulations.

IN WITNESS WHEREOF, The undersigned agree to the terms, conditions, and stipulations of this right-of-way lease/grant.

Attachments

Exhibit A: Legal Description and Map

Exhibit B: Stipulations

Southern Nevada District Manager

[0/13][0]
(Effective Date of Right-of-Way Lease/Grant)

CAS VEGAS FIELD MANAGER

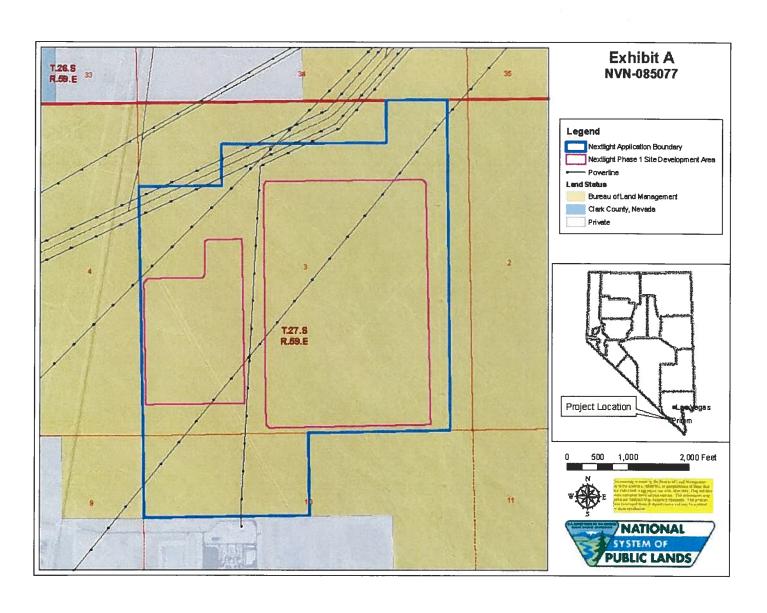
EXHIBIT A

LEGAL DESCRIPTION AND MAP

Mount Diablo Meridian, Nevada T. 27 S., R. 59 E.,

Sec. 3, Lot 1 (within), Lot 2 (within), Lot 3 (within), W½E½SE¼NE¼, W½SE¼NE¼, SW¼NE¼, S½NW¼, SW¼, W½E½E½SE¼, W½E½SE¼, W½SE¼;

Sec. 10, N¹/₂NW¹/₄.



STIPULATIONS

- 1. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the approved Plan of Development, as amended or supplemented by approval of the Authorized Officer. Any surface disturbing activity, additional construction, or use that is not in accord with the approved Plan of Development shall not be initiated without the prior written approval of the Authorized Officer. A copy of the complete right-of-way lease/grant, including all stipulations and approved Plan of Development, shall be made available on the right-of-way area during construction, operation, and decommissioning. Noncompliance with the above will be grounds for immediate temporary suspension of activities if it constitutes a threat to public health or safety or the environment.
- 2. The holder shall comply with the Biological Opinion for listed and proposed species associated with this project signed by the US Fish and Wildlife Service on September 16, 2010. Failure to comply with the requirements of the Biological Opinion shall be cause for suspension or termination of the right-of-way lease/grant. [protective measures from the Biological Opinion may be attached to the right-of-way lease/grant or incorporated into the Plan of Development]
- 3. Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

The holder shall immediately notify the BLM Authorized Officer of any paleontological resources discovered as a result of operations under this authorization. The holder shall suspend all activities in the vicinity of such discovery until notified to proceed by the Authorized Officer, and shall protect the locality from damage or looting. The Authorized Officer will evaluate, or will have evaluated, such discoveries as soon as possible, but not later than 5 working days after being notified. Appropriate measures to mitigate adverse effects to significant paleontological resources will be determined by the Authorized Officer after consulting with the holder. The holder is responsible for the cost of any investigation necessary for the evaluation and for any mitigation measures, including museum curation. The holder may not be required to suspend operations if activities can avoid further impacts to a discovered locality or be continued elsewhere, however not suspending operations must be approved by the Authorized Officer.

In order to avoid any effects to 26CK1620/8282 and 26CK2632/8280 during road construction activities, an archaeological monitor will be present during land disturbing activities along the proposed main access road within 100 feet of 26CK1620/8282 and 26CK2632/8280 in the northwest corner of the right-of-way lease/grant area. Further, should any deep excavations be conducted in this sand dune area, a qualified and BLM-approved geo-archaeologist or geologist will be present to analyze the

excavation(s) to determine the presence or absence of the former Pleistocene Ivanpah Lake bottom and the amount of associated post lake deposition.

Although unlikely, any human remains that may be discovered during authorized activities shall be protected by all Project personnel and construction crew members by following the procedures set forth in Section VI of the October 26, 2009, State Protocol Agreement between the BLM and the Nevada State Historic Preservation Office. This includes at a minimum: 1) it is the responsibility of the holder to notify the BLM authorized contracting officer and archaeologist immediately, 2) cease all construction activities within a 100 meter buffer area, and 3) to ensure protection of the discovery from further damage or vandalism until a BLM-authorized archaeologist evaluates the nature of the materials. If needed, mitigation procedures will be developed by the BLM in consultation with the State Historic Preservation Office.

- 4. The holder shall comply with the construction practices and mitigating measures established by 33 CFR 323.4, which sets forth the parameters of the "nationwide permit" required by Section 404 of the Clean Water Act. If the proposed action exceeds the parameters of the nationwide permit, the holder shall obtain an individual permit from the appropriate office of the Army Corps of Engineers and provide the Authorized Officer with a copy of same. Failure to comply with this requirement shall be cause for suspension or termination of the right-of-way lease/grant.
- 5. All powerlines shall be designed and constructed to be avian-safe in accordance with the standards outlined in "Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006" (APLIC 2006). Unless otherwise agreed to in writing by the Authorized Officer, powerlines shall also be constructed in accordance with standards outlined in "Suggested Practices for Raptor Protection on Powerlines", Raptor Research Foundation, Inc., 1996. The holder shall assume the burden and expense of proving that pole designs not shown in the raptor protection publication are "eagle safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modifications or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.
- 6. The holder will arrange and attend preconstruction conference(s) prior to the holder's commencing construction and/or surface disturbing activities on the right-of-way or specific construction phase of the right-of-way as specified by the Authorized Officer. The holder and/or his representatives will attend this conference. The holder's contractor, or agents involved with construction and/or any surface disturbing activities associated with the right-of-way, will also attend this conference to review the stipulations of the authorization, including the Plan of Development, as applicable. The holder shall notify the Authorized Officer of the schedule for any preconstruction conference at least 10 calendar days in advance of the preconstruction conference or such timeframe as may be required by the Notice to Proceed.
- 7. The holder shall designate a representative who shall have the authority to act upon and to implement instructions from the Authorized Officer. The holder's representative shall be available for communication with the Authorized Officer within a reasonable time when construction or other surface disturbing activities are underway.

- 8. The holder shall protect all survey markers found within the right-of-way. Survey markers include, but are not limited to, Public Land Survey System line and corner markers, other property boundary line and corner markers, and horizontal and vertical geodetic monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the Authorized Officer and the respective installing authority if known. Where any of the above survey markers are obliterated or disturbed during operations, the Authorized Officer will determine how the marker is to be restored. The holder will be instructed to secure the services of a registered land surveyor or informed that an official survey will be executed by the Bureau of Land Management (BLM). All surveying activities will be in conformance with the Manual of Surveying Instructions and appropriate State laws and regulations. Surveys by registered land surveyors will be examined by the Authorized Officer and the BLM State Office Chief Cadastral Surveyor for conformance with the Manual of Surveying Instructions and State laws and regulations before being filed in the appropriate State or county offices of record. The holder shall be responsible for all administrative and survey costs.
- 9. Use of pesticides and herbicides shall comply with all applicable Federal and State laws. Pesticides and herbicides shall be used only in accordance with their registered uses within limitations imposed by the Secretary of the Interior. Prior to the use of the pesticides, the holder shall obtain from the Authorized Officer, written approval of a Pesticide Use Proposal Plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, locations of storage and disposal of containers, and any other information deemed necessary by the Authorized Officer.
- 10. Only those chemicals (pesticides and herbicides) listed on the BLM approved label list are authorized for use on public lands. A Pesticide Use Proposal must be submitted for each chemical used, and it cannot be used until approval has been obtained in writing from the Authorized Officer. The proposal needs to identify any surfactants or dyes used in the spraying operation. Applicator(s) of chemicals used must have completed pesticide certification training and have a current up to date Certified Pesticide Applicator's License. Pesticide and herbicide application records for the areas and acres treated must be submitted to the Authorized Officer each year. This includes the following:

Brand or Product name
EPA registration number
Total amount applied (use rate #A.I./acre)
Date of application
Location of application
Size of area treated
Method of treatment (air/ground)
Name of applicator
Certification number and dates
Costs to treatment
Amount of surfactants or dyes used in spraying operation

The record information must be recorded no later than 14 calendar days following the pesticide or herbicide application and must be maintained for ten years.

11. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. 'Waste' means all discarded matter

including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment. A litter policing program shall be implemented by the holder which covers all roads and sites associated with the right-of-way.

12. The holder shall comply with all applicable Federal, State, and local laws and regulations, existing or hereafter enacted or promulgated, with regard to any hazardous materials, as defined by 43 CFR 2801.5 that will be used, produced, or transported on or within the right-of-way, or used in the construction, operation, maintenance, or decommissioning of the right-of-way or any of its facilities. The holder agrees in accordance with 43 CFR 2807.12(e) to fully indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601 et seq., or the Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6901 et seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

The holder shall immediately report any release of hazardous substances (leaks, spills, etc.) caused by the holder or third parties in excess of the reportable quantity as required by federal, state, or local laws and regulations. A copy of any report required or requested by any federal, state or local government agency as a result of a reportable release or spill of any hazardous substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved federal, state or local government agency.

The holder shall immediately notify the Authorized Officer of any release of hazardous substances, toxic substances, or hazardous waste on or near the right-of-way or potentially affecting the right-of-way of which the holder is aware.

As required by law, the holder shall have responsibility for and shall take all action(s) necessary to fully remediate and address the hazardous substance(s) on or emanating from the right-of way.

13. Within 120 calendar days of completion of construction, the holder shall submit to the Authorized Officer, as-built drawings and a certification of construction verifying that the facility has been constructed in accordance with the design, plans, specifications, and applicable laws and regulations.

Within 90 days of construction completion, the holder shall provide the Authorized Officer with data in a format compatible with the Bureau's Arc-Info Geographic Information System to accurately locate and identify the right-of-way:

Acceptable data formats are:

Corrected Global Positioning System files with sub-meter accuracy or better, in UTM NAD 83; Zone 11;

ARCGIS export files on a CD ROM, shapefile, geodatabase.

Data may be submitted in any of the following formats: ARCGIS interchange, shapefile or geodatabase format. CD ROM in compressed or uncompressed format.

All data shall include metadata for each coverage, and conform to the <u>Content Standards for Digital</u> <u>Geospatial Metadata</u> Federal Geographic Data Committee standards. Contact the GIS Department at (702) 515-5000.

14. The holder shall be liable for all fire suppression costs resulting from fires caused during construction or operations. All guidelines and restrictions imposed by agency fire control officials will be followed.

The following fire prevention measures shall be implemented by the holder or its contractor during construction:

- Maintain a list of all relevant fire fighting authorities near the project site. The closest resources
 to respond to a wild land fire threatening the community of Primm would come from Clark
 County Fire Department Station 78 in Goodsprings;
- Have and maintain available fire suppression equipment in all construction areas, including but not limited to: water trucks, potable water pumps, and chemical fire extinguishers. Ensure an adequate supply of fire extinguishers for welding and brushing crews;
- Include mechanisms for fire suppression in all heavy equipment, including fire extinguishers and spark arresters or turbo-charging (which eliminates sparks in exhaust);
- Remove any flammable wastes generated during construction on a regular basis;
- Vegetation clearing shall be accomplished in a manner that reduces vegetation and does not create a fire hazard;
- Store all flammable materials used at the construction site;
- Allow smoking only in designated smoking areas; and
- Require all work crews to park vehicles away from flammable vegetation, such as dry grass and brush. At the end of each workday, heavy equipment should be parked over mineral soil, asphalt, or concrete, where available, to reduce the chance of fire.
- 15. Prior to a Notice to Proceed being issued, the holder may conduct activities necessary for the installation of the perimeter fencing, designed with a desert tortoise exclusionary fence along its bottom edge, and activities necessary to clear desert tortoises from the area enclosed within the fence, as described in the approved Biological Opinion for the portion of the project being authorized. All activities must be conducted in accordance with the approved Biological Opinion for this project and all other terms, conditions and stipulations of this right-of-way authorization.
- 16. The holder shall, prior to construction activities, provide the Authorized Officer a Revised Plan of Development, a Performance and Reclamation bond, a Site Restoration Plan, a Groundwater Monitoring Plan, and a Traffic Management Plan. Prior to construction, and upon approval of the Plan of Development, acceptance of the Performance and Reclamation bond, approval of the third-party

Compliance Inspection Contractor, approval of the Site Restoration Plan, approval of the Groundwater Monitoring Plan, and approval of the Traffic Management Plan, a Notice to Proceed will be issued by the Authorized Officer.

- 17. The holder shall submit for approval to the Authorized Officer a Revised Plan of Development that is reflective of the activities authorized in the right-of-way lease/grant. The holder shall ensure that the following elements are contained within the Revised Plan of Development:
 - Erosion and sedimentation control measures to be used to minimize impacts during the life of the project. At a minimum, this will include: soil stabilization measures to offset loss in vegetation, biannual and post-storm monitoring of erosion and sedimentation, annual monitoring of the surface of Roach Dry Lake to assess effects of sedimentation (monitoring at Roach Dry Lake will be conducted in a manner that will not interfere with the Southern Nevada Supplemental Airport (SNSA)), and adaptive management of actions if erosion and sedimentation control measures are found to be insufficient to control surface water at the site. Any changes must be approved in advance by the Authorized Officer.
 - A storm water monitoring and response plan to be used to minimize impacts from flood damage during the life of the project. At a minimum, this plan shall include: visual surveys of all structures for scour following major storm events, visual surveys of fencing to check for damage and/or debris, cleanup of broken equipment if failures do occur, inspection and cleanup of downstream areas, including the surface of Roach Dry Lake, if debris is transported off site, and adaptive management of flood protection and erosion actions if the monitoring plan reveals routine damage to project structures due to flooding. Any changes must be approved in advance by the Authorized Officer.
 - Flood risk control measures to be used to minimize impacts during the life of the project. These measures shall include adhering to the recommendations presented in the holder's Initial Site Drainage Plan (Louis Berger 2010). At a minimum, this plan shall include:
 - PV panels designed to be at least 6 inches above the high water mark as defined in the Louis Berger report, concrete ballasts would not be used on areas rated at moderate or higher risk flood zone after House (2006). Steel post foundations would be used in these flood-prone areas. Steel post foundations (8 to 12 feet in depth) in flood-prone areas would be designed to withstand a minimum of 1.5 feet of scour; and
 - Concrete ballasts would not be used on areas rated at moderate or higher risk flood zone after House (2006). Steel post foundations would be used in these flood-prone areas. Steel post foundations (8 to 12 feet in depth) in flood-prone areas would be designed to withstand a minimum of 1.5 feet of scour; and
 - Adaptive management of actions if erosion and sedimentation control measures are found to be insufficient or excessive or if flooding proves to be destructive. Any changes must be approved by the Authorized Officer.

- Measures to reduce night lighting in all natural areas to avoid unnecessary visual disturbance to wildlife. Methods to be implemented include, but are not limited to, shielding methods, and/or reduced lumen intensity.
- 18. The holder shall develop, and submit for approval by the Authorized Officer, a Site Restoration Plan that describes measures to mitigate and compensate for special status plants such as transplanting/re-seeding and/or compensation in consultation with appropriate agencies (USFWS, BLM, and/or NDOW). The plan will also outline the protocol for the re-vegetation of the portions of the project area that are classified as temporarily impacted. The plan will provide a matrix showing how the holder will address each species considered sensitive in terms of mitigation type (e.g., seed collection, salvage, fencing certain populations). This will include clearly describing how cacti and yucca species will be salvaged, stored, and re-established. The plan will also define success criteria in accordance with agency guidance and outline mitigation measures to be implemented if the success criteria are not met.
- 19. The holder shall fund and implement a third party Compliance Program with the Authorized Officer. The Program will include the holder hiring an independent third-party Compliance Inspection Contractor, to be approved by the Authorized Officer, to insure compliance with the terms, conditions and stipulations of this lease/grant, N-85077. All questions or concerns regarding compliance with the terms, conditions, and stipulations of this right-of-way lease/grant shall be directed to the Authorized Officer.
- 20. The holder shall develop, implement, and submit for approval by the Authorized Officer a Groundwater Monitoring Plan prior to construction. The plan will include metering of project wells and monthly reports to the Las Vegas Valley Water District and quarterly reports on water use to the BLM and State Engineer.
- 21. The holder will produce, and submit for approval by the Authorized Officer, a Traffic Management Plan that identifies Best Management Practices (BMP) to minimize construction-related traffic impacts. Specifically, the BMPs shall ensure an adequate flow of traffic in both directions by providing sufficient signage to alert drivers of construction zones, notifying emergency responders prior to construction, conducting community outreach, and control traffic around impacted intersections. The Traffic Management Plan shall also include the following:
 - Deliveries of materials will be scheduled for off-peak hours to reduce effects during periods of peak traffic;
 - To further reduce effect to the I-15/Primm Boulevard off ramp, the plan will identify the I-15 / Yeats Well Road off ramp as an alternate access route to the project site during peak construction;
 - Truck traffic will be phased throughout construction;
 - Truck traffic will use designated truck routes when arriving to and departing from the proposed work sites;
 - The holder will require 50 percent of the construction workforce to carpool or vanpool; and

- Signs and public notices regarding construction work will be distributed before disruptions occur, identifying detours to maintain access, the use of flagmen or escort vehicles to control and direct traffic flow, and scheduling roadway work during periods of minimum traffic flow.
- 22. The holder shall ensure that all structures installed as part of the project will be color treated to reduce contrast with the surrounding environment. Structures to be color treated include the PV panel frames and support beams, the interconnection transmission towers, any walls surrounding switchyard/substation facilities, the operations and maintenance structure, fences installed around the project, water tanks, and any other walls or enclosed structures installed as part of the project. The holder will work with the Authorized Officer to select the appropriate color from the BLM approved color palette. All color treatments shall be approved by the Authorized Officer prior to any application.
- 23. The holder shall implement the following plan for the all cactus and yucca species that are salvaged from the right-of-way lease/grant area:

The BLM will conduct a series of public and commercial sales to reduce the number of cactus and yucca present. The proponent shall reimburse the BLM for costs associated with the sales through a cost reimbursable account. The BLM staff from renewable resources, law enforcement and support services will arrange, advertise and implement the sales. Logistically, the sales will take place after the area has been fenced and cleared of tortoise.

For the remaining cactus and yucca that are not purchased as a result of the BLM sponsored public and commercial sales, the holder shall fund, setup, and maintain three cactus and yucca stockpiles to assist with BLM habitat restoration, road closure, and mine reclamation programs. Stockpiles would be set up: (1) at Ann Road in Las Vegas, (2) The Desert Tortoise Center in Las Vegas, and (3) near Searchlight, all locations will be selected and approved by the Authorized Officer. The holder shall contract with a BLM-approved company to set-up and maintain the stockpiles. Set-up would include: fencing 1 to 2-acre sites with t-post and wire (or repair existing fencing if present), salvage and transplant cactus/yucca in trenches and water plants at least once a month (or more frequently, as needed, or as directed by the Authorized Officer). The holder shall continue maintenance (watering) for a one year period.

The BLM restoration and reclamation crews shall have full project site access during construction, to salvage cactus, yucca and other plant materials (shrubs, cryptogrammic crusts) on an as needed basis. Any remaining cactus and yucca after the abovementioned steps are completed would not be salvaged; however, the final determination on the completion of salvaging activities at the project area will be made by the Authorized Officer.

- 24. The holder shall conduct all construction activity (including, but not limited to, truck deliveries, pile driving, and vibration equipment use) only during daytime hours (7:00 a.m. and 10:00 p.m.) while in the vicinity of the Desert Oasis Apartment Complex and near residential or recreational areas.
- 25. The holder shall turn off idling equipment when not in use.

- 26. The holder shall notify adjacent residents in advance of construction work through public mailings and signs directed toward residents, landowners, and recreational users within one mile of the site prior to commencement of construction. The notice shall state specifically where and when construction activities will occur in the area. The holder shall also provide a communication line or procedures to enable individuals to contact the contractor in the event that construction noise levels affect them. The holder shall provide the Authorized Officer with the mailing list and a copy of the notice that was mailed immediately following the mailing.
- 27. The holder shall install acoustic barriers around stationary construction noise sources as necessary to maintain a noise level not to exceed 85 dba at the property boundary closest to the nearest residence.
- 28. The holder shall ensure that construction equipment is maintained per manufacturers' recommendations. The holder shall ensure that all equipment is adequately muffled and maintained, to include: use of noise controls on standard construction equipment and shielding on impact tools, use of broadband noise backup alarms on mobile equipment, and installation of mufflers on exhaust stacks of all diesel and gasdriven engines.
- 29. The holder shall ensure proper installation of transformer equipment by: installing transformers within enclosures, using sound-dampening pads between each transformer and the mounting surface, using flexible conduit couplings between each transformer and the associated wiring system, and mounting the transformers on surfaces with a large mass to avoid amplifying the sound.
- 30. To minimize or avoid potential hazards from earthquakes and other geologic events, the holder is responsible for funding inspections to be performed by a BLM-approved appropriate professional (e.g. geologist, geophysicist, geologic engineer, or structural engineer) following geologic events in the vicinity of the project site. The appropriate professional will perform the appropriate inspection and make recommendations to ensure that hazards are minimized for the next comparable or larger event. The holder will implement the recommended corrective actions.
- 31. The holder shall acquire the appropriate insurance coverage to address potential off-site damage to structures or injury to people by facility structures that are moved off-site by a geologic event such as an earthquake or flash flood event.
- 32. The holder shall ensure that imported soils are free from contaminants before use on the site. At the request of the Authorized Officer, soils shall be tested (at the cost of the holder) to ensure that hazardous materials are not present within the imported fill.
- 33. The holder shall ensure that imported soils are consistent in texture and drainage characteristics to existing on-site soils before use on the site. At the request of the Authorized Officer and the expense of the holder, soils will be tested to ensure they are of the same soil type as pre-construction soils.
- 34. If drainages cannot be avoided by infrastructure placement, the holder shall design drainage crossings to accommodate estimated peak flows and ensure that natural volume capacity can be maintained throughout construction and upon post-construction restoration.

- 35. Preconstruction surveys must be conducted by qualified biologists according to the most current USFWS protocols, where available, by species. These surveys will include surveying mowing areas, brush clearing areas, and ground disturbance areas within habitat deemed suitable for sensitive species by a qualified biologist. These surveys will be conducted for the presence of special status plants, the presence of noxious weeds, and the presence of general and special status wildlife species, to prevent direct loss of vegetation and wildlife and to prevent the spread of noxious plant species. The holder will submit survey results to the Authorized Officer.
- 36. A Worker Environmental Awareness Program (WEAP) shall be prepared by the holder. All construction crews and contractors will be required to participate in WEAP training prior to starting work on the project. The WEAP training shall include a review of the special status species and other sensitive resources that could exist in the project area, the locations of sensitive biological resources and their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all trained personnel will be maintained.

The holder will ensure that biological monitors monitor and enforce disturbance buffers around all active bird nests (for raptors and species protected by the MBTA) found in project areas during construction. The general bird breeding season for this area is late February to early July. For raptors specifically, the holder will use the USFWS Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (1999) to determine appropriate survey areas and disturbance buffers for active nests. For all non-raptor bird species, biologists will survey within project areas. Because there are no standardized disturbance buffers for active non-raptor bird nests, the holder will consult with the appropriate agencies (BLM, USFWS, and NDOW) on a case-by-case basis when active nests are found in project areas, unless directed to do otherwise by these same agencies.

Active bird nests will not be moved during breeding season, unless the holder is expressly permitted to do so by the USFWS, BLM, and NDOW.

All active nests and disturbance or harm to active nests will be reported within 24 hours to the USFWS, the BLM, and NDOW upon detection. The biological monitor will halt work if it is determined that active nests are being disturbed by construction activities, until further direction or approval to work is obtained from the appropriate agencies.

37. The holder shall ensure that the following will be done:

A qualified biologist will conduct preconstruction surveys within 30 days prior to construction for western burrowing owl within suitable habitat prior to breeding season (February 1 through August 31). All areas within 250 feet of the project area will be surveyed, per USFWS 2007 burrowing owl guidance.

If an active nest is identified, there will be no construction activities within 250 feet of the nest location to prevent disturbance until the chicks have fledged, as determined by a qualified biologist.

The occurrence and location of any western burrowing owl will be documented by biological monitors in daily reports and submitted to the authorized biologist on a daily basis. The authorized biologist will

report all incidents of disturbance or harm to burrowing owls within 24 hours to the appropriate resource agencies (USFWS, BLM, and/or NDOW).

The holder shall ensure compliance with the following NDOW construction site protocols for the Gila monster (NDOW 2005). These protocols are also applicable for the chuckwalla. Through the WEAP, workers and other project personnel should (at a minimum) know how to: (1) identify Gila monsters and be able to distinguish them from other lizards such as chuckwallas and banded geckos; (2) report any observations of Gila monsters (in Nevada) to the biological monitor for notification of the NDOW; (3) be alerted to the consequences of a bite resulting from carelessness or unnecessary harassment; and (4) be aware of protective measures provided under state law.

- Live Gila monsters found in harm's way on the construction site will be captured and then detained in a cool, shaded environment (<85 degrees Fahrenheit) by the project biologist or equivalent personnel until a NDOW biologist can arrive for documentation purposes. Despite the fact that a Gila monster is venomous and can deliver a serious bite, its relatively slow gait allows for it to be easily coaxed or lifted into an open bucket or box, carefully using a long handled instrument such as a shovel or snake hook (note: it is not the intent of NDOW to request unreasonable action to facilitate captures; additional coordination with NDOW will clarify logistical points). A clean 5-gallon plastic bucket with a secure, vented lid; an 18-inch x 18-inch x 4-inch plastic sweater box with a secure, vented lid; or a tape-sealed cardboard box of similar dimension may be used for safe containment. Additionally, written information identifying the mapped capture location (e.g., GPS record), date, time, and circumstances (e.g., biological survey or construction) and habitat description (e.g., vegetation, slope, aspect, and substrate) will also be provided to NDOW.
- Injuries to Gila monsters may occur during excavation, blasting, road grading, or other construction activities. In the event a Gila monster is injured, it should be transferred to a veterinarian proficient in reptile medicine for evaluation of appropriate treatment. Rehabilitation or euthanasia expenses would not be covered by NDOW. However, NDOW immediately will be notified during normal business hours. If an animal is killed or found dead, the carcass immediately will be frozen and transferred to NDOW with a complete written description of the discovery and circumstances, habitat, and mapped location.
- Should NDOW's assistance be delayed, biological or equivalent acting personnel on site may be requested to remove and release the Gila monster out of harm's way. Should NDOW not be immediately available to respond for photo-documentation, a 35-mm camera or equivalent (5 megapixel digital minimum preferred) will be used to take good quality images of the Gila monster in situ at the location of live encounter or dead salvage. The pictures, preferably on slide film (.tiff or .jpg digital format) will be provided to NDOW. Pictures will include the following information: (1) encounter location (landscape with Gila monster in clear view); (2) a clear overhead shot of the entire body with a ruler next to it for scale (Gila monster should fill camera's field of view and be in sharp focus); and (3) a clear, overhead close-up of the head (head should fill camera's field of view and be in sharp focus).
- 38. The holder shall ensure that all steep-walled trenches, auger holes, or other excavations are covered at the end of each day. Fencing will be maintained around the covered excavations at night. For open

trenches, earthen escape ramps will be maintained at intervals of no greater than 0.25 mile. A biological monitor will inspect all trenches, auger holes, or other excavations a minimum of twice per day, and also immediately prior to back-filling. Any species found will be safely removed and relocated out of harm's way, using a pool net when applicable. For safety reasons, biological monitors will, under no circumstance, enter open excavations.

39. The holder shall ensure that the following occurs:

Qualified biologists will be notified if badgers are observed within the project area during construction activities. Work will immediately be stopped in the area if the biologists find occupied burrows within 100 feet of construction activities during preconstruction surveys.

Qualified biologists will ensure passive relocation of the occupied burrow by installing one-way trap doors on the burrow. The burrow will be collapsed after the badger vacates.

The qualified biologist will ensure that any badger that is to be relocated will be relocated within suitable badger habitat.

Work will be allowed to resume once the burrow has been relocated.

- 40. The holder shall consult with the BLM, USFWS, and NDOW regarding conservation measures to be implemented to avoid impacts on desert bighorn sheep during construction. Avoidance and minimization measures could include such elements as preconstruction surveys, biological monitoring, and timing construction activities to avoid bighorn sheep active seasons.
- 41. The holder shall work closely with the Clark County Department of Aviation to ensure that all planning, construction, and operation remains compatible with airport projects and future airport operations.
- 42. The holder shall implement a Hazardous Materials Handling Management Program or incorporate within their other program the item outlined below. Hazardous materials used and stored onsite will be managed according to the specifications outlined below as follows:
 - Hazardous Materials Handling Program. A project-specific hazardous materials management program will be developed prior to initiation of construction. The program will outline proper hazardous materials use, storage, and disposal requirements. The program will identify types of hazardous materials to be used during construction activities. All personnel will be provided with project-specific training. This program will be developed to ensure that all hazardous materials are handled in a safe and environmentally sound manner. Employees will receive hazardous materials training and will be trained in: hazardous waste procedures; spill contingencies; waste minimization procedures; and treatment, storage, and disposal facility (TSDF) training in accordance with OSHA Hazard Communication.
 - Transport of Hazardous materials. Hazardous materials that will be transported by truck include fuel (diesel fuel and gasoline), and oils and lubricants for equipment. Containers used to store hazardous materials will be properly labeled and kept in good condition. Written procedures for the transport of hazardous materials used will be established in accordance with U.S. Department

- of Transportation (USDOT), and Nevada Department of Transportation (NDOT) regulations. A qualified transporter will be selected to comply with federal and state transportation regulations.
- Fueling and Maintenance of Construction Equipment: Written procedures for fueling and maintenance of construction equipment will be prepared prior to construction. Vehicles and equipment will be refueled on site or by tanker trucks. Procedures will include the use of drop cloths made of plastic, drip pans, and trays to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling stations will be located in designated areas where absorbent pads and trays will be available. The fuel tanks will also contain a lined area to ensure that accidental spills do not occur. Drip pans or other collection devices will be placed under the equipment at night to capture drips or spills. Equipment will be inspected daily for potential leakage or failures. Hazardous materials such as paints, adhesives and solvents, will be kept in an approved locker or storage cabinet.
- 43. The holder will either return solar panel products to the original manufacturer or send them to a certified recycling facility after the solar PV cells are decommissioned. Solar panel material recycling and end-of-life disposal will be done in compliance with the federal, state, and local regulations.
- 44. The holder will ensure that the all health and safety and emergency plans to be required for employees and contractors during construction, operations, and decommissioning of the authorized facility will comply with the Occupational Safety and Health Standards provided in federal regulation 29 CFR, Part 1910, as well as with applicable state and local occupational health and safety regulations.
- 45. The holder shall notify FAA by filing FAA Form 7460 at least 30 days before construction is to begin or the date that an application for construction permit is to be filed.
- 46. No signs or advertising devices shall be placed on the premises or on adjacent public lands, except those posted by or at the direction of the Authorized Officer.
- 47. The Holder shall mark the exterior boundaries of the right-of-way with stake and/or lath at 100 to 200 foot intervals. The intervals may be varied at the time of staking at the discretion of the Authorized Officer. The tops of the stakes and/or laths will be painted and the laths flagged in a distinctive color as determined by the holder. The holder shall maintain all boundary stakes and/or laths in place until final cleanup and restoration is completed.
- 48. The holder shall conduct all activities associated with construction, operation, maintenance and decommission of this right-of-way lease/grant within its authorized limits.
- 49. The holder shall not violate applicable air standards or related facility sitting standards established by or pursuant to applicable federal, state, or local laws or regulations. The holder shall be responsible for dust abatement within the limits of the right-of-way lease/grant and is responsible for obtaining all necessary permits from appropriate authorities for acceptable dust abatement and control methods (e.g., water, chemicals). The holder shall be solely responsible for all violations of any air quality permit, law or regulation, as a result of its action, inaction, use or occupancy of the right-of-way.

Notwithstanding whether a violation of any air quality permit, law or regulation results, the holder will cooperate with the Authorized Officer in implementing and maintaining reasonable and appropriate dust control methods in conformance with law and appropriate to the circumstances at the sole cost of the holder.

Prior to relinquishment, abandonment, or decommission of this right-of-way, the holder shall apply reasonable and appropriate dust abatement and control measures to all disturbed areas. The abatement and measures shall be designed to be effective over the long-term (e.g., rock mulch or other means) and acceptable to the Authorized Officer.

During excavation, backfilling, and contouring, the disturbed soil shall be wetted sufficiently in order to effectively reduce airborne dust and reduce soil erosion.

50. The holder shall comply with all applicable local, state, and federal air, water, hazardous substance, solid waste, or other environmental laws and regulations, existing or hereafter enacted or promulgated. To the full extent permissible by law, the holder agrees to indemnify and hold harmless, within the limits, if any, established by state law (as state law exists on the effective date of this right-of-way), the United States against any liability arising from the holder's use or occupancy of the right-of-way, regardless of whether the holder has actually developed or caused development to occur on the right-of-way, from the time of the issuance of this right-of-way to the holder, and during the term of this right-of-way lease/grant. This agreement to indemnify and hold harmless the United States against any liability shall apply without regard to whether the liability is caused by the holder, its agents, contractors, or third parties. If the liability is caused by third parties, the holder will pursue legal remedies against such third parties as if the holder were the fee owner of the right-of-way.

Notwithstanding any limits to the holder's ability to indemnify and hold harmless the United States which may exist under state law, the holder agrees to bear all responsibility (financial or other) for any and all liability or responsibility of any kind or nature assessed against the United States arising from the holder's use or occupancy of the right-of way regardless of whether the holder has actually developed or caused development to occur on the right-of-way from the time of the issuance of this right-of-way to the holder and during the term of this right-of-way lease/grant.

51. Mineral material generated, and not needed for construction or development activities within the authorized limits of the right-of-way lease/grant, requires a specific BLM use authorization in accordance with regulations at 43 CFR 3600 prior to the removal of in place excess mineral material. All mineral material generated needs to be used on site within the right-of-way lease/grant area or stockpiled on site for sale by the BLM.